

REMARKS

This Application has been carefully reviewed in light of the Office Action mailed September 8, 2004. Applicant amends Claims 20, 24, 32, 45, 59-60, 63, 70. Applicant cancels Claim 61. Applicant respectfully requests reconsideration and favorable action in this case.

Claim Objections

The Examiner objects to Claims 59-61 and 70 for minor informalities and requested correction. Applicant amends Claims 59-60 and 70 to address the Examiner's concerns. Applicant also cancels Claim 61, thereby obviating the Examiner's objection to that claim.

Section 112 Rejections

The Examiner rejects Claims 20-22, 24-26, 32-34, 45, 59, and 63 under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant amends Claims 20, 24, 32, 45, 59, and 63 to address the Examiner's concerns.

Section 102 Rejections

The Examiner rejects Claims 1-3, 6-9, 12-16, 19-26, 29, 32-37, and 40-72 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,304,578 issued to Fluss (“*Fluss*”).

Claim 1 recites:

A system for verifying spectral compatibility of a communication system that utilizes at least one digital subscriber line protocol, comprising:
a plurality of digital subscriber line access multiplexers; and
a communications channel coupling the plurality of digital subscriber line access multiplexers, each digital subscriber line access multiplexer operable to transmit and receive at least one training message over the communications channel, the training message indicating that a carrier has at least received a request to train a digital subscriber line modem and the training message comprising:
a company identifier identifying the carrier that has at least received the request to train the digital subscriber line modem; and
a modem identifier identifying the digital subscriber line modem.

Fluss fails to recite, expressly or inherently, every element of Claim 1 for several reasons. First, *Fluss* fails to recite a “digital subscriber line access multiplexer operable to transmit and receive at least one training message . . . , the training message indicating that a carrier has at least received a request to train a digital subscriber line modem” as recited by Claim 1. At the outset, Applicant respectfully notes that *Fluss* does not even remotely mention any training of digital subscriber line modems. Instead, *Fluss* is directed to the prioritization of packets at the headend of a shared data channel, such as at a central office that, in one embodiment, includes DSLAMs. Col. 3, ll. 18-28. Moreover, the noticeable disparity between the Examiner’s description of *Fluss* and the actual teachings of this reference, with regards to both terminology and substantive content, suggests that the Examiner may be basing this rejection, at least in part, on personal knowledge or other information external to the cited reference. Applicants respectfully note that for the purposes of supporting a rejection under 35 U.S.C. § 102, “the reference must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present.” *M.P.E.P.* § 706.02.

Yet, with respect to this element of Claim 1, the Examiner states that:

Referring to Figure 2, DSLAM 205, during operation receives line characterization messages (training messages) and generates responses across DSL lines 221, which indicate a request to train a DSL modem.

Office Action, p. 4.

Nonetheless, Figure 2 of *Fluss*, is silent with respect to any “training message[s]” that may be received by the DSLAM of *Fluss*. Figure 2 shows only that DSLAM 205 is connected to Ethernet link 209 on which data packets are transmitted. Figure 2; Column 5, lines 52-56. The Examiner also references *Fluss* at Column 5, lines 34-37. The cited text, however, states only that “[t]he purpose of DSLAM 205, as will be appreciated by those skilled in the art, is to combine or consolidate the bandwidths of access loops 221 from central office 203, onto a more efficiently utilized link.” Col. 5, ll. 34-37. As a result, this cited portion of the text is also silent with regard to any form of “training message[s].” Thus, both the cited figure and the cited portion of the text fail to disclose the term used by the Examiner, “line characterization messages,” or anything else the Examiner may reasonably equate with the claimed “training message.” Moreover, Applicant respectfully notes that the term “line characterization message” does not appear anywhere within the text of *Fluss*, and no object in any of the figures of *Fluss* is labeled as a “line characterization message.” Applicant respectfully notes that “[w]hen a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable.” 37 C.F.R. § 1.104(c)(2). Thus, if the Examiner continues to rely on such “line characterization messages” in rejecting the claims of this Application, Applicant respectfully requests that the Examiner provide a specific citation from *Fluss* that discloses such “line characterization messages.” Moreover, because *Fluss* fails to disclose the “line characterization messages” which the Examiner equates with the “training message[s]” of Claim 1, *Fluss* fails to recite, expressly or inherently, a “digital subscriber line access multiplexer operable to transmit and receive at least one training message . . . , the training message indicating that a carrier has at least received a request to train a digital subscriber line modem” as recited by Claim 1.

Second, *Fluss* also fails to disclose any form of message comprising “a company identifier identifying the carrier that has at least received the request to train the digital subscriber line modem.” With respect to this element, the Examiner states that “[r]eferring to Figure 2, the line characterization message comprises test signal [sic] that identifies the carrier that is requesting the training of the DSL modem.” *Office Action*, p. 4. Nonetheless, as noted above, *Fluss* in fact fails to disclose, in Figure 2 or any other portion of *Fluss*, any

form of “training messages,” whether they are called “line characterization messages” or anything else. Furthermore, *Fluss* also fails to disclose the “test signal” relied upon by the Examiner. In fact, the term “test signal” does not appear anywhere within the text of *Fluss*, and no object in any of the figures of *Fluss* is labeled as a “test signal.” Applicant again respectfully notes that “[w]hen a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable.” 37 C.F.R. § 1.104(c)(2). Thus, if the Examiner continues to rely on this “test signal” in rejecting the claims of this Application, Applicant respectfully requests that the Examiner provide a specific citation from *Fluss* that discloses such a “test signal.” Because *Fluss* does not disclose a “test signal” or any other element that “identif[ies] the carrier that is requesting the training of the DSL modem” as the Examiner contends, *Fluss* also fails to disclose “a company identifier identifying the carrier that has at least received the request to train the digital subscriber line modem” as recited by Claim 1.

Third, *Fluss* also fails to disclose any form of message comprising “a modem identifier identifying the digital subscriber line modem.” With respect to this element the Examiner states only that “[r]eferring to Figure 2, the line characterization message comprises the modem’s MAC address, modem identifier.” *Office Action*, p. 4. Nonetheless, as noted above, *Fluss* in fact fails to disclose, in Figure 2 or any other portion of *Fluss*, any form of “training messages,” whether called “line characterization messages” or anything else. *Fluss* also fails disclose any other form of message that “includes a modem’s MAC address” as the Examiner suggests. In fact, the term “MAC address” does not appear anywhere within the text of *Fluss*, and no object in any of the figures of *Fluss* is labeled as a “MAC address.” Thus, if the Examiner continues to rely on this “MAC address” in rejecting the claims of this Application, Applicant respectfully requests that the Examiner provide a specific citation from *Fluss* that discloses such a “MAC address.” Because *Fluss* does not disclose a “[a] line characterization message [that] comprises the modem’s MAC address” as the Examiner contends, or any other form of message “identifying the digital line subscriber modem,” *Fluss* also fails to disclose “a modem identifier identifying the digital subscriber line modem” as recited by Claim 1.

In total, it appears that the Examiner may be relying on personal knowledge or experience with xDSL technology to make rejections that are simply not supported by *Fluss*

under 35 U.S.C. § 102. Applicants respectfully note that such personal knowledge or experience is insufficient for a rejection under 35 U.S.C. § 102. "The identical invention must be shown in as complete detail as is contained in the . . . claims" and "[t]he elements must be arranged as required by the claim." *Richardson v. Suzuki Motor Co.*, 9 USPQ 2d 1913, 1920 (Fed. Cir. 1989); *In re Bond*, 15 USPQ 2d 1566 (Fed. Cir. 1990); MPEP § 2131 (*emphasis added*)."

As a result, for at least these reasons, *Fluss* fails to recite, either expressly or inherently, several elements of Claim 1. Claim 1 is allowable for at least these reasons. Applicant respectfully requests reconsideration and allowance of Claim 1 and its dependents.

Additionally, several of the dependents of Claim 1 are allowable for additional reasons. As one example, Claim 6 recites:

The system of Claim 1, wherein each digital subscriber line access multiplexer is operable to transmit a distress message over the communications channel, the distress message operable to indicate that the digital subscriber line modem violates at least one compliance guideline.

With respect to this element the Examiner states only that "[r]eferring to Figure 2, subsequent line characterizations are performed after the initial characterization, the DSLAM receives the subsequent line characterizations which indicate any changes due to interference (distress message) the subsequent line characterizations indicate a new source of interference, violation of compliance guideline.)" *Office Action*, p. 4. Applicant respectfully notes again that neither Figure 2 nor any other portion of the text or figures of *Fluss* discloses any form of "distress message[s]," whether called "line characterization messages" or anything else, that are "operable to indicate that the digital subscriber line mode violates at least one compliance guideline." Moreover, neither Figure 2 nor any other portion of the figures or text of *Fluss* discloses any form of messages that "indicate any changes due to interference" as suggested by the Examiner. *Office Action*, p. 4. In fact, *Fluss* fails to make any reference to any form of "interference." Thus, *Fluss* fails to disclose, either expressly or inherently, additional elements of Claim 6. Claim 6 is thus allowable for at least this additional reason. As noted above, Applicant respectfully requests reconsideration and allowance of Claim 6.

Although of different scope from Claim 1, Claims 16, 23, 29, and 35 include elements that, for reasons substantially similar to those discussed above with respect to Claim 1, are not taught, expressly or inherently, by *Fluss*. Thus, Claims 16, 23, 29, and 35 are allowable

for at least these reasons. Applicant respectfully requests reconsideration and allowance of Claims 16, 23, 29, and 35, and their respective dependents.

Claim 40 recites:

A system for verifying spectral compatibility of a communication system that utilizes at least one digital subscriber line protocol, comprising:
a plurality of digital subscriber line access multiplexers; and
a communications channel coupling the plurality of digital subscriber line access multiplexers, each digital subscriber line access multiplexer operable to transmit a distress message over the communications channel, the distress message indicating that a digital subscriber line modem violates at least one compliance guideline and the distress message comprising:
a company identifier identifying a carrier that trained the digital subscriber line modem; and
a modem identifier identifying the digital subscriber line modem.

Fluss also fails to disclose, expressly or inherently, every element of Claim 40 for several reasons. First, fails to disclose a “digital subscriber line access multiplexer operable to transmit a distress message . . . , the distress message indicating that a digital subscriber line modem violates at least one compliance guideline” as recited by Claim 40. With respect to this element, the Examiner states merely that:

Referring to FIGURE 2, based on the broad and literal interpretation of the term “coupling,” the Examiner interprets the channel from the subscribers 220 through DSLAM 205 to the Ethernet Hub 204 and through the next subsequent DSLAM 205 to the next subset of subscribers 220 as the claimed communication channel which “couples” the DSLAMs for receiving and transmitting modem line characterization messages. . . Referring to Figure 2, subsequent line characterizations are performed after the initial characterization, the DSLAM receives the subsequent line characterizations which indicate any changes due to interference (distress message) the subsequent line characterizations indicate a new source of interference, violation of compliance guideline.

Office Action, p. 7-8.

Applicant respectfully notes that *Fluss* in its entirety, both in the figures and the text, fails to disclose any form of “distress message[s],” whether called “line characterization messages” or anything else, that “indicat[e] that a digital subscriber line modem violates at least one compliance guideline.” Thus, *Fluss* fails to recite, expressly or inherently, a “digital subscriber line access multiplexer operable to transmit a distress message over the communications channel, the distress message indicating that a digital subscriber line modem violates at least one compliance guideline” as recited by Claim 40.

Second, *Fluss* also fails to disclose any form of message comprising “a company identifier identifying a carrier that trained the digital subscriber line modem.” With respect to this element, the Examiner states that “[r]eferring to Figure 2, the line characterization message comprises test signal [sic] that identifies the carrier that is requesting the training of the DSL modem.” Office Action, p. 8. Nonetheless, as noted above, *Fluss* in fact fails to disclose, in Figure 2 or any other portion of *Fluss*, any form of “distress messages”, whether identified as “line characterization messages,” “test signals,” or any thing else, that the Examiner might reasonably equate with the “distress message” of Claim 40. Moreover, *Fluss* further fails to disclose any other form of message that “identifies the carrier that is requesting the training modem.” Thus, *Fluss* also fails to disclose “[a] distress message comprising . . . a company identifier identifying the carrier that has at least received the request to train the digital subscriber line modem” as recited by Claim 40.

Third, *Fluss* also fails to disclose any form of message comprising “a modem identifier identifying the digital subscriber line modem.” With respect to this element, the Examiner states that “[r]eferring to Figure 2, the line characterization message comprises the modem’s MAC address, modem identifier.” Office Action, p. 8. Nonetheless, as noted above, *Fluss* in fact fails to disclose, in Figure 2 or any other portion of *Fluss*, any form of “distress messages”, whether identified as “line characterization messages” or anything else, that the Examiner might reasonably equate with the “distress message” of Claim 40. Moreover, *Fluss* further fails to disclose any other form of message that comprises “a modem identifier identifying the digital subscriber line modem.” Thus, *Fluss* also fails to disclose “[a] distress message comprising . . . a modem identifier identifying the digital subscriber line modem” as recited by Claim 40.

As a result, for at least these reasons *Fluss* fails to recite, either expressly or inherently, several elements of Claim 40. Claim 40 is allowable for at least this reason. Applicant respectfully requests reconsideration and allowance of Claim 40 and its dependents.

Although of different scope from Claim 40, Claims 44, 54, 62, 65, and 71 include elements that, for reasons substantially similar to those described above with respect to Claim 1, are not disclosed, taught, or suggested by *Fluss*. Thus, Claims 44, 54, 62, 65, and 71 are

allowable for at least these reasons. Applicant respectfully requests reconsideration and allowance of Claims 44, 54, 62, 65, and 71, and their respective dependents.

Claim 49 recites:

A digital subscriber line access multiplexer comprising:
a multiplexer operable to receive signals from a plurality of digital subscriber line connections and to aggregate the signals for transmission over a high-speed backbone line;
a controller operable to receive a spectral management message, the spectral management message comprising information related to a training of a digital subscriber line modem over one of the subscriber lines, and to generate a distress message using a previously-received training message; and
an interface coupled to the controller and operable to receive the spectral management message over a spectral management channel.

Fluss also fails to disclose, expressly or inherently, every element of Claim 49 for several reasons. First, *Fluss* fails to disclose “a controller operable to receive a spectral management message, the spectral management message comprising information related to a training of a digital subscriber line modem over one of the subscriber lines” as recited by Claim 49. With respect to this element, the Examiner states merely that:

Referring to Figure 2, DSLAM 205, inherently comprising a CPU (controller), during operation receives line characterization messages (spectral management message related to training) and generates responses across DSL lines 221. See Column 5, lines 34-37.

Office Action, p. 9.

Applicant respectfully notes that *Fluss* in its entirety, both in the figures and the text, fails to disclose any form of “spectral management messages”, whether identified as “line characterization messages” or any thing else, that “compris[es] information related to a training of a digital subscriber line modem[.]” Thus, *Fluss* fails to recite, expressly or inherently, “a controller operable to receive a spectral management message, the spectral management message comprising information related to a training of a digital subscriber line modem over one of the subscriber lines” as recited by Claim 49.

Second, *Fluss* fails to disclose “a controller operable to . . . generate a distress message using a previously-received training message.” Because *Fluss* fails to disclose the “line characterization message” equated by the Examiner with the “training message” of Claim 49, *Fluss* also fails to disclose any form of “using a previously-received training

message” Thus, *Fluss* fails to recite, expressly or inherently, a “a controller operable to . . . generate a distress message using a previously-received training message.”

As a result, for at least these reasons *Fluss* fails to recite, either expressly or inherently, every element of Claim 49. Claim 49 is allowable for at least these reasons. Applicant respectfully requests reconsideration and allowance of Claim 49 and its dependents.

Although of different scope from Claim 49, Claims 58 and 68 include elements that, for reasons substantially similar to those described above with respect to Claim 1, are not disclosed by *Fluss*. Thus, Claims 58 and 68 are allowable for at least these reasons. Applicant respectfully requests reconsideration and allowance of Claims 58 and 68, and their respective dependents.

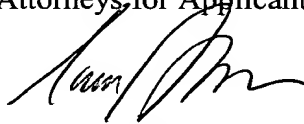
Conclusions

Applicant has made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicant respectfully requests full allowance of all pending Claims. If the Examiner feels that a telephone conference or an interview would advance prosecution of this Application in any manner, the undersigned attorney for Applicant stands ready to conduct such a conference at the convenience of the Examiner.

No fees are believed to be due, however, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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